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Wey

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[54] PAINT SUPPLYING DEVICE

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[52] U.S. Cl. ..... 401/153; 401/48; 401/152; 401/164; 401/172; 401/188 R

[58] Field of Search ..... 401/48, 145, 152, 153, 401/158, 161, 163, 164, 169, 171, 172, 174, 188 R

[56] References Cited

U.S. PATENT DOCUMENTS

1,085,789	2/1914	Bennett	401/172 X
1,389,772	9/1921	Miller et al.	401/158 X
3,049,745	8/1962	Lambers	401/153

FOREIGN PATENT DOCUMENTS

524935 12/1953 Belgium 401/172

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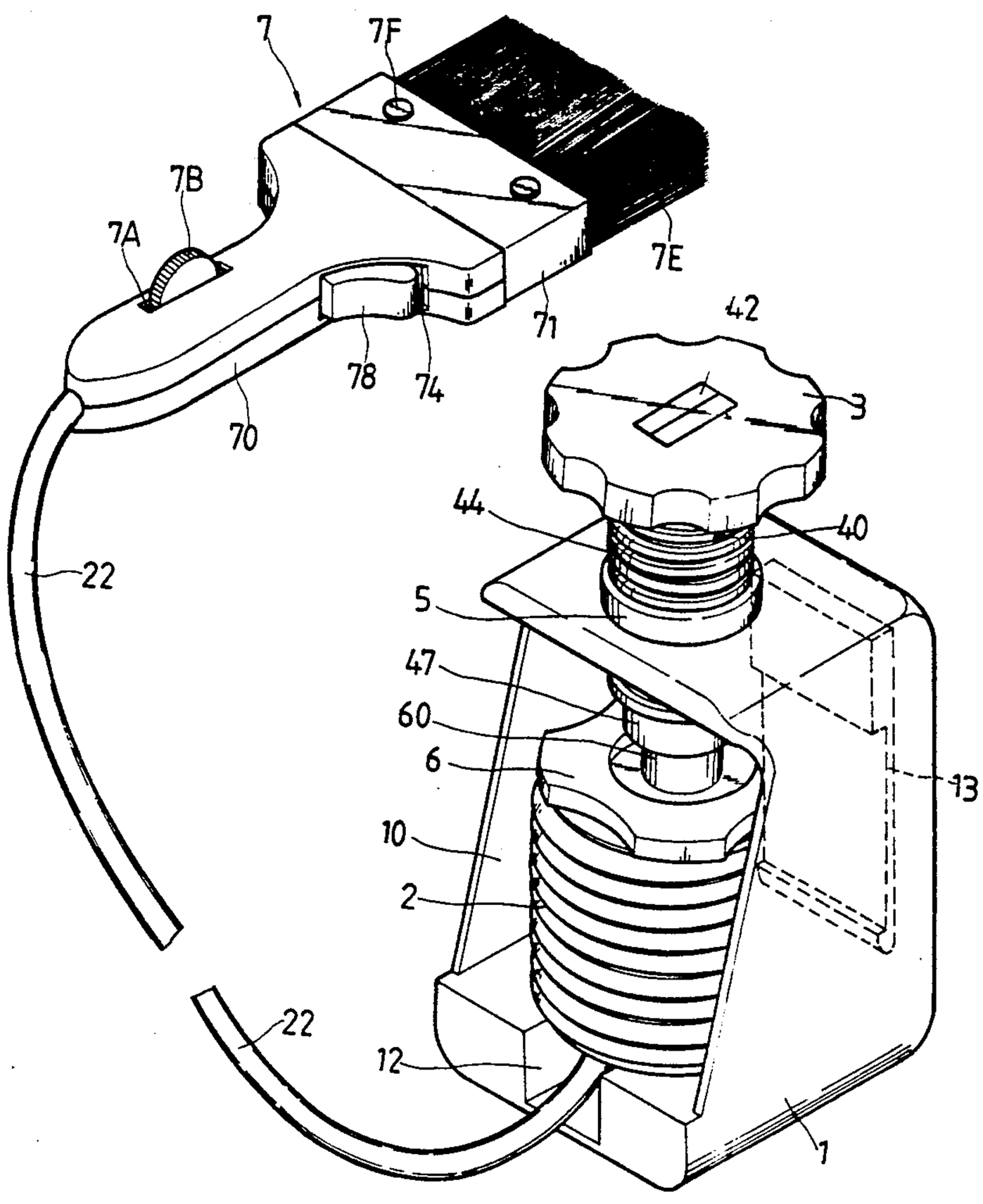
Attorney, Agent, or Firm—Alfred Lei

[57] ABSTRACT

This invention relates to a paint supplying device and in particular to one including a body portion, a compressible container disposed within the body portion and provided at the bottom with an outlet engaged with a cap, a rotating disc mounted on the top of the container and having a slot, an elevating cylinder having at the top a protuberance engaged with the slot of the rotating disc and formed with external threads, a spring arranged within the elevating cylinder, a guide ring threadedly engaged with the elevating cylinder, a movable press plate engaged with the lower end of the elevating cylinder and provided on the upper end with a neck having a flange on the top, and a brush connected with the container via a flexible pipe.

3 Claims, 5 Drawing Sheets



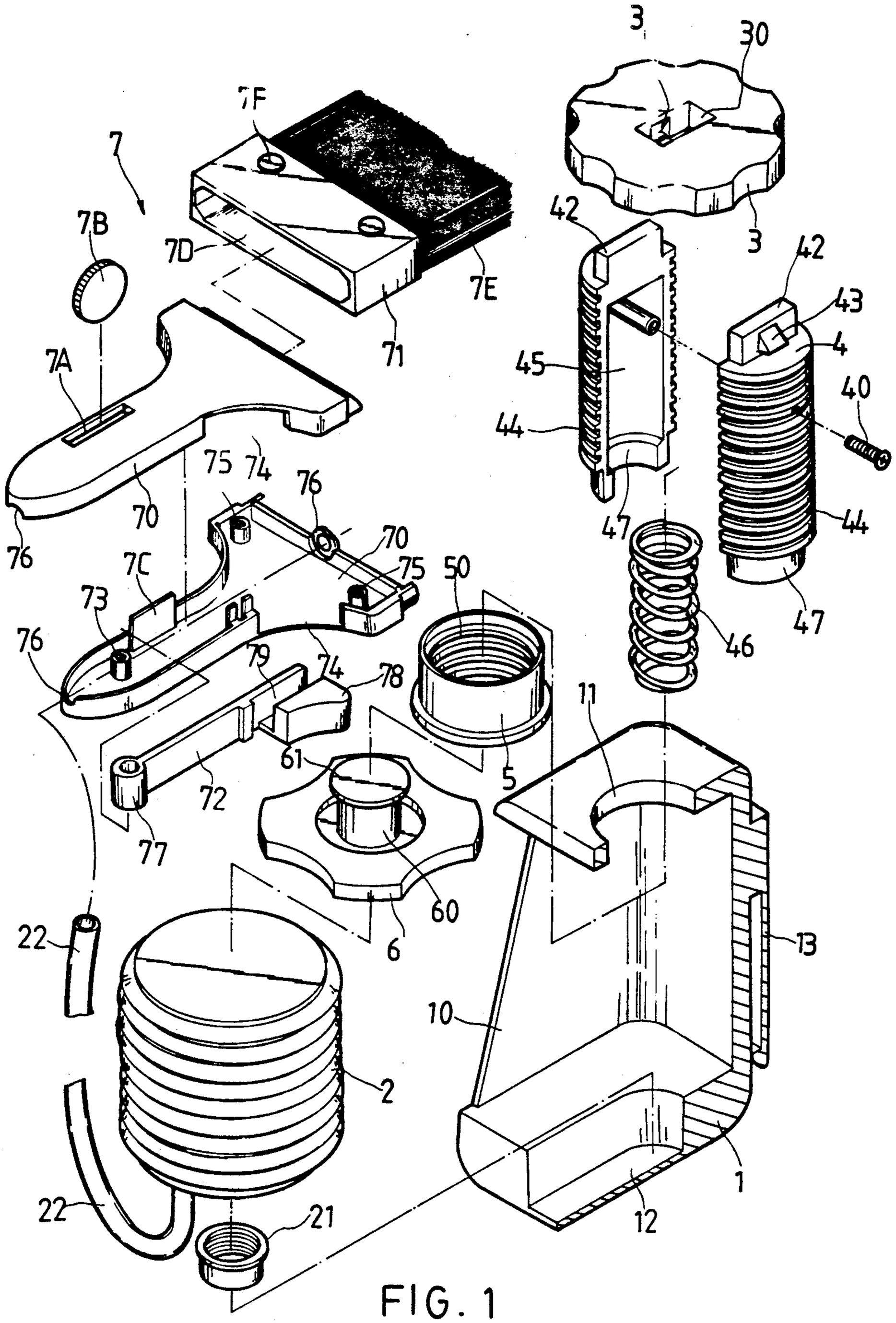

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FIG. 1

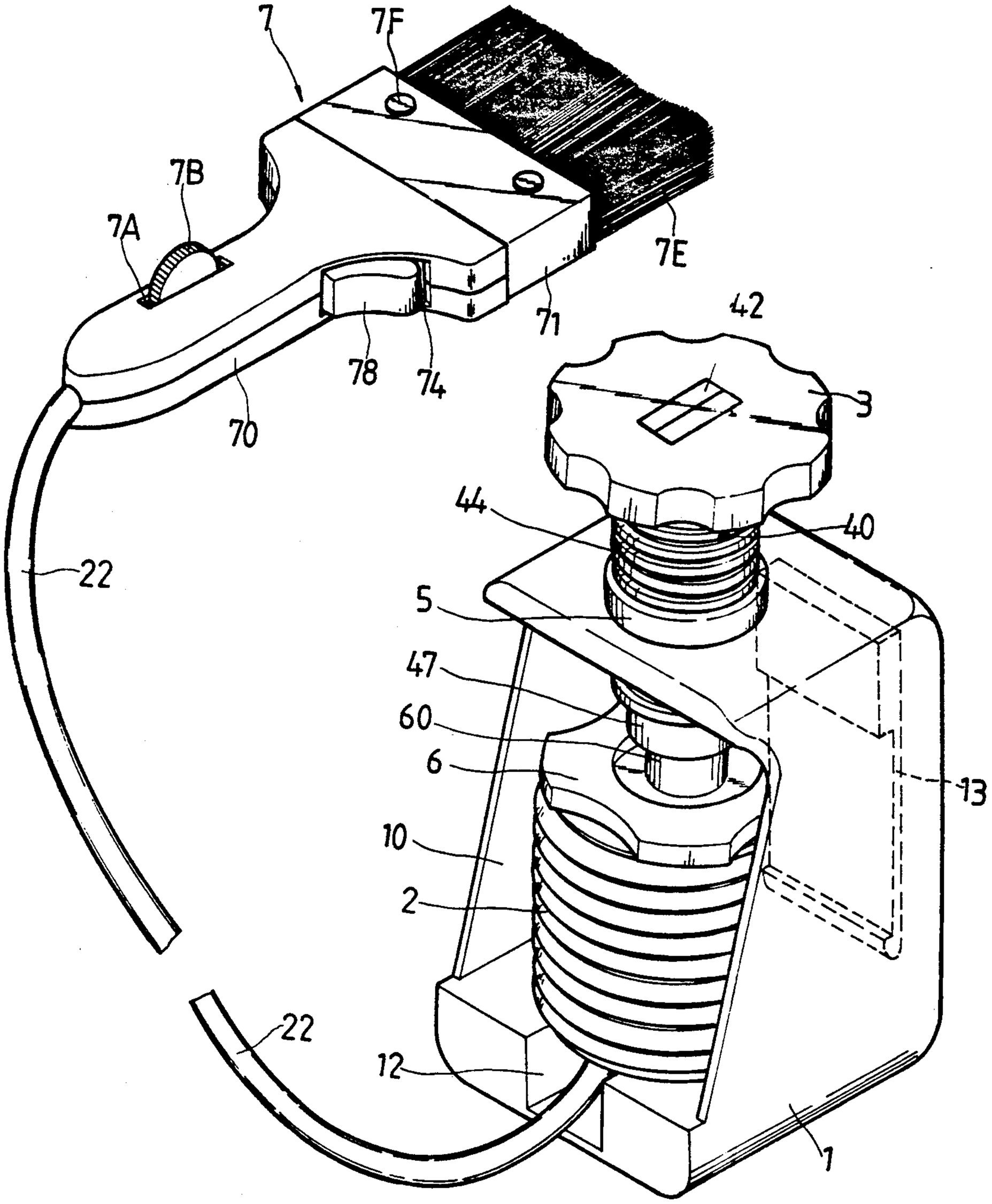

FIG. 2

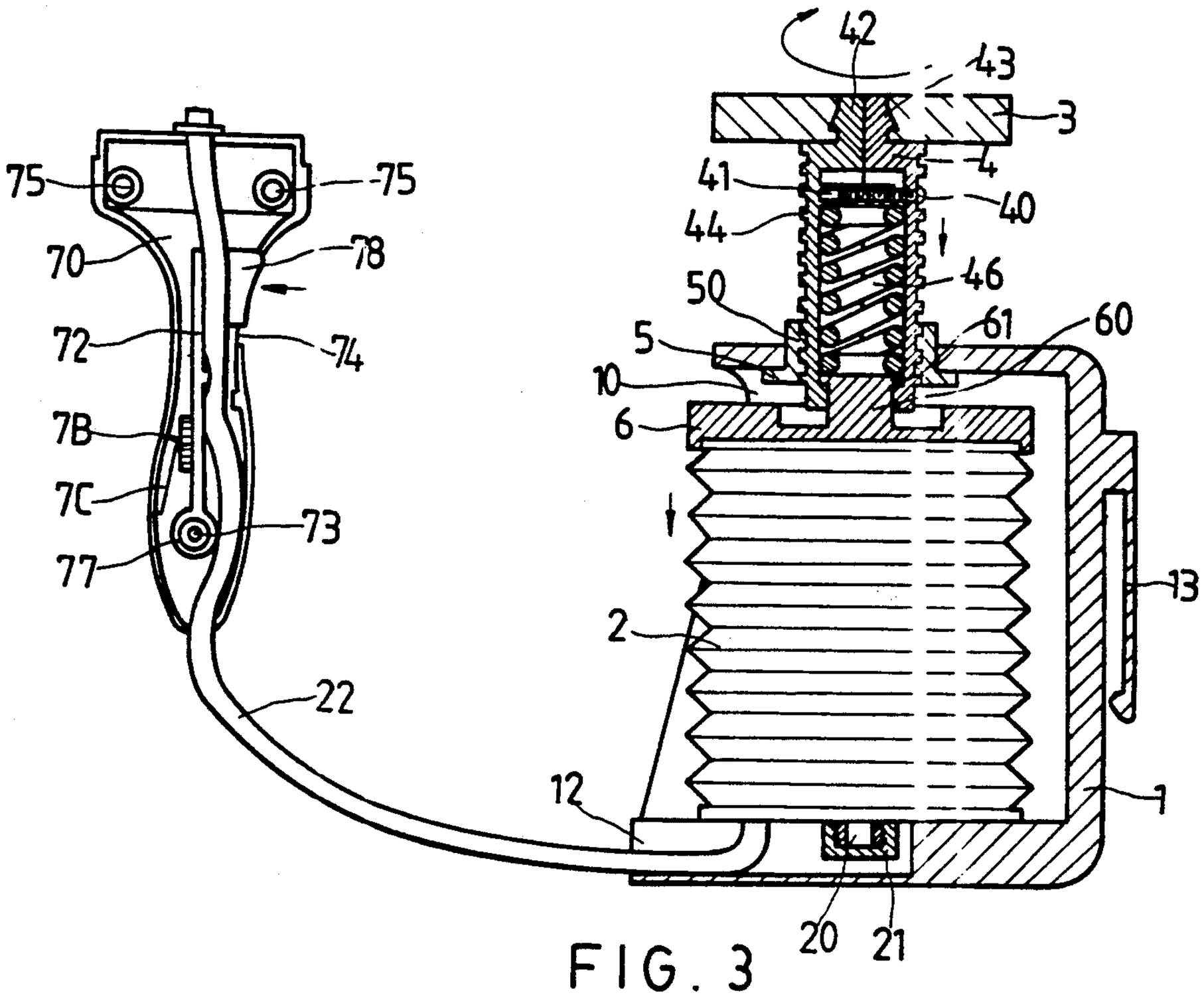
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FIG. 3

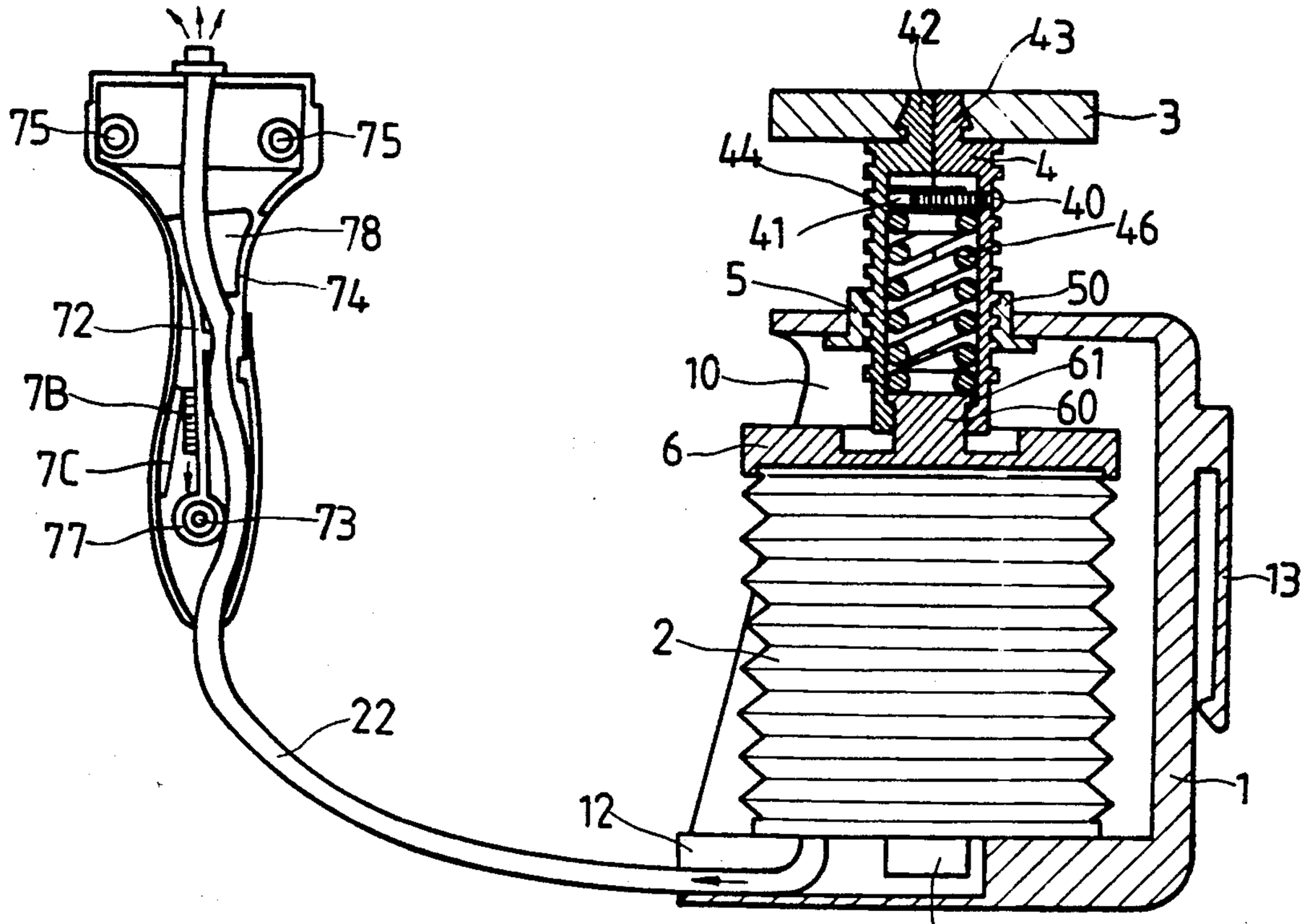
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FIG. 4

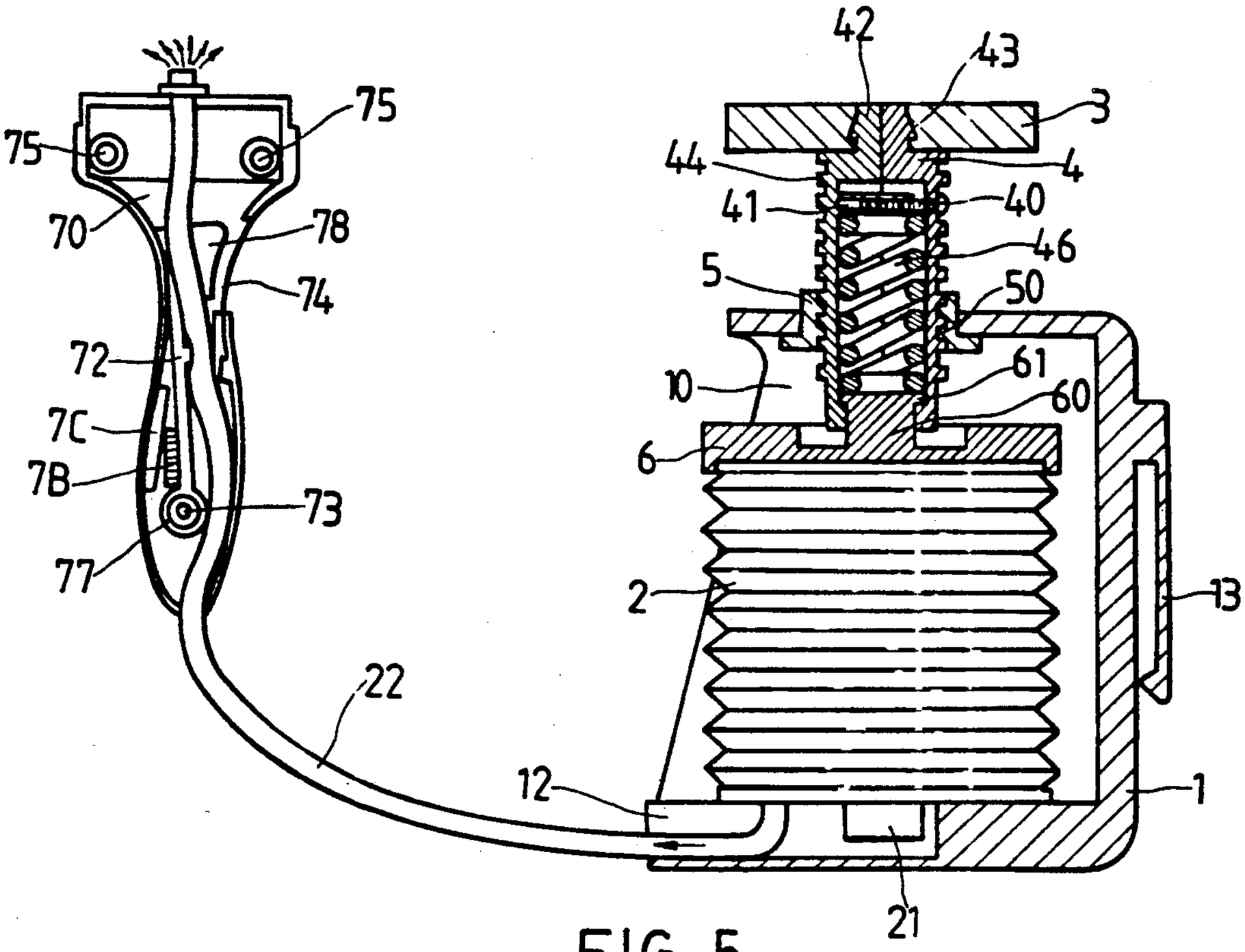
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FIG. 5

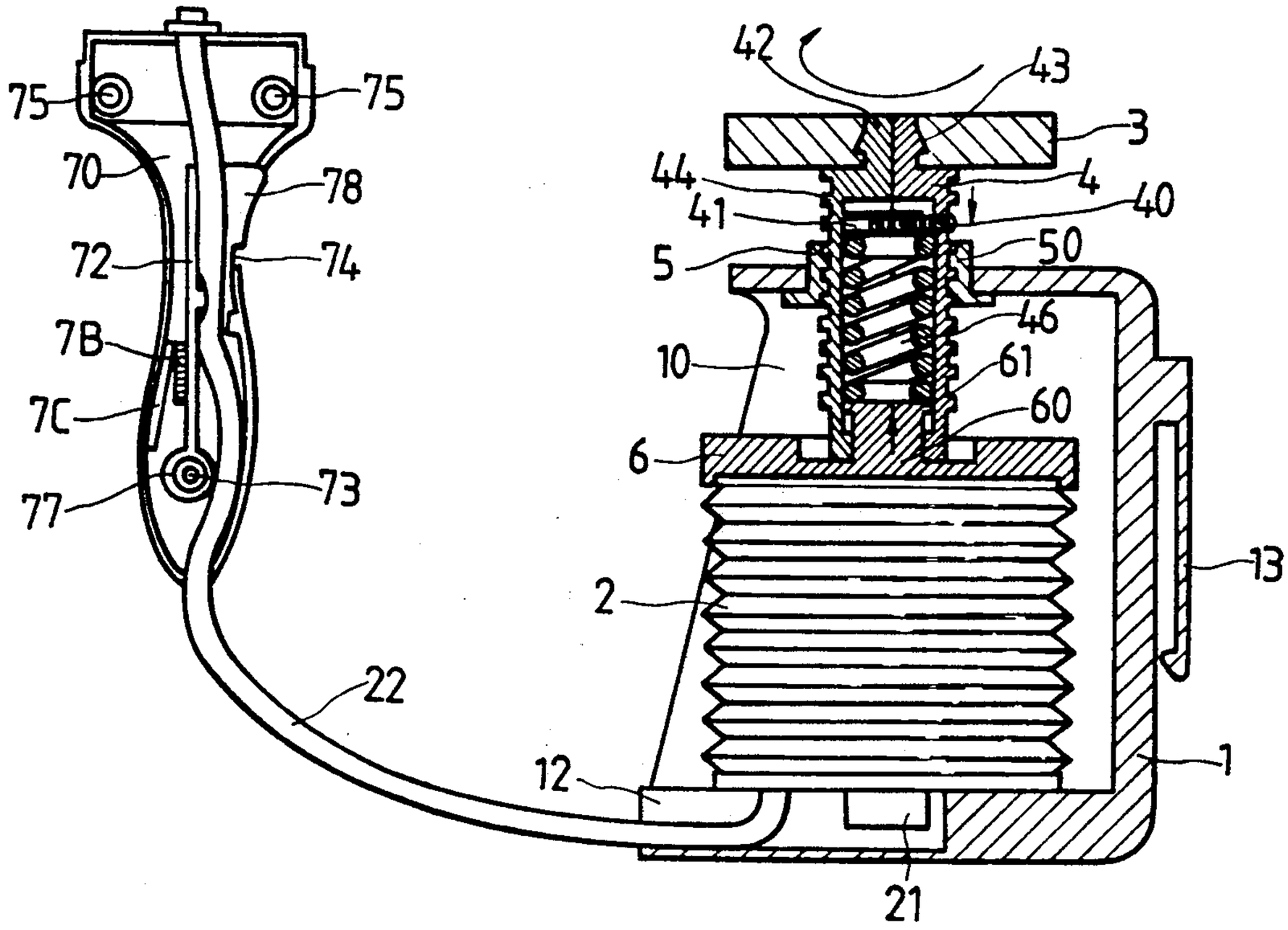
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FIG. 6

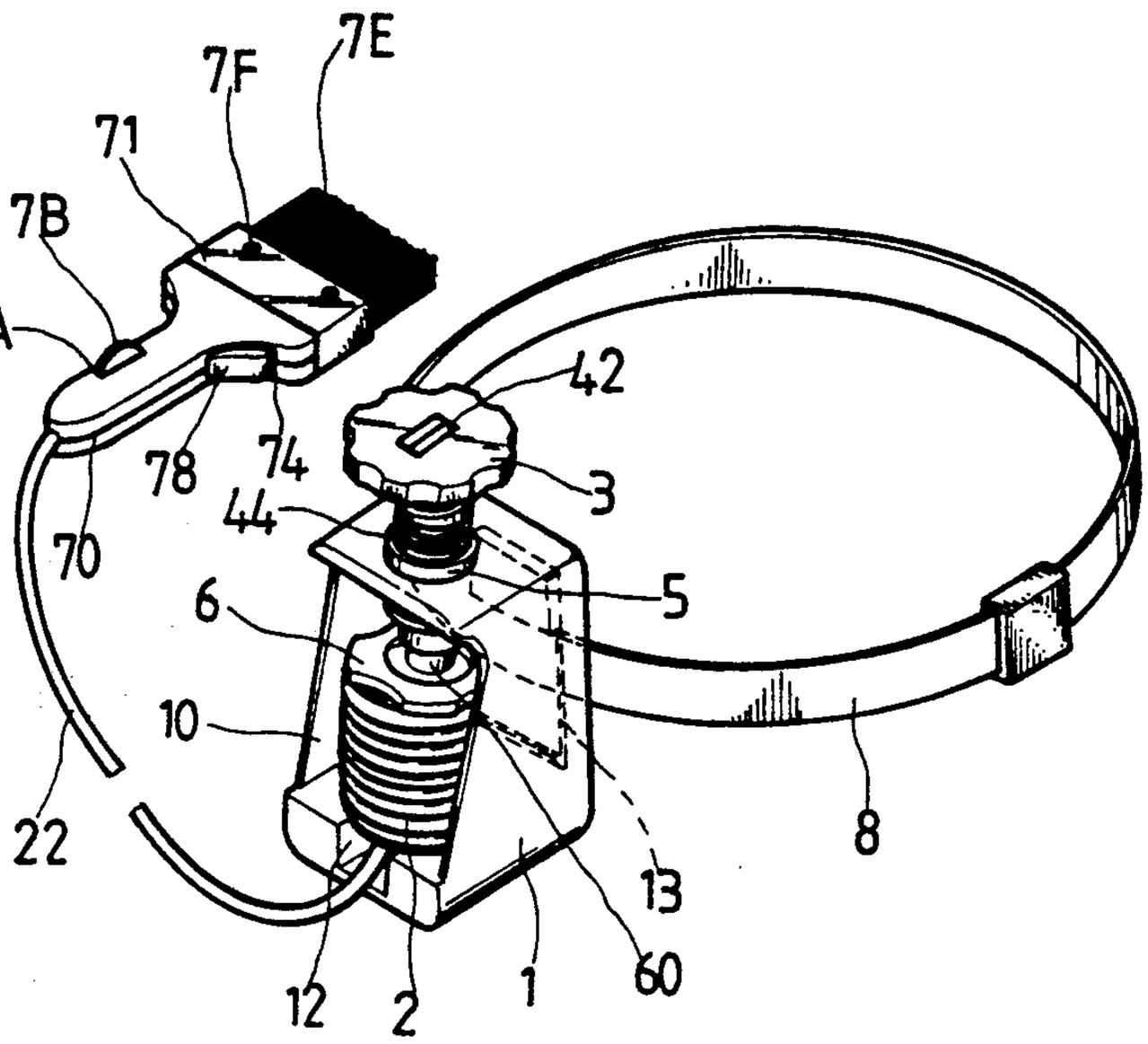

FIG. 7

PAINT SUPPLYING DEVICE

BACKGROUND OF THE INVENTION

It has been found that the conventional way for a workman to apply paint is that the workman must hold a brush with one hand and a can of paint with the other and then immerse the brush into the paint and use the brush to polish on the desired object. However, such operation has the following drawbacks:

1. It is very difficult to apply paint evenly on the desired object.

2. It is inconvenient to hold the brush with one hand and a can of paint with the other.

3. The excess paint will drop down on the floor and so it is necessary to arrange waste newspaper on the floor in advance so as to prevent the floor from being dirtied.

4. A lot of paint is wasted.

5. It is time-consuming to carry out the operation of applying paint.

Therefore, it is an object of the present invention to provide an improved paint supplying device which may obviate and mitigate the above-mentioned drawbacks.

SUMMARY OF THE INVENTION

This invention relates to an improved paint supplying device.

It is the primary object of the present invention to provide a paint supplying device which may automatically and evenly supply paint to the brush.

It is another object of the present invention to provide a paint supplying device which may be operated with one hand only.

It is still another object of the present invention to provide a paint supplying device which is simple in construction.

It is still another object of the present invention to provide a paint supplying device which is paint saving in use.

It is a further object of the present invention to provide a paint supplying device which is easy to use.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. **1** is an exploded view of the present invention;

FIG. **2** is a perspective view of the present invention;

FIGS. **3**, **4**, **5** and **6** show the working principle of the present invention.

FIG. **7** shows the device attach to a users belt.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT

Before explaining the present invention in detail, it is to be understood that the invention is not limited in its application to the details of construction and arrangement of parts illustrated in the accompanying drawings, since the invention is capable of other embodiments and of being practiced or carried out in various ways. Also it is to be understood that the phraseology or terminology employed herein is for the purpose of description and not of limitation.

With reference to the drawings and in particular to FIGS. **1** and **2** thereof, the paint supplying device according to the present invention mainly comprises a body portion **1** having an opening **10** in which is accommodated a container **2** for receiving paint. Further, the body portion **1** is formed with a hole **11** on the top, a recess **12** on the bottom, and a hook member **13** on the rear side.

The container **2** is a compressible vessel with an outlet **20** at the center of the bottom from which paint may filled therein. In addition, the outlet **20** of the container **2** is engaged with a cap **21** for keeping the paint in the container **2**. Moreover, the bottom of the container **2** is connected with a flexible pipe **22**.

A rotating disc **3** is disposed on the top of the container **2**, which has a slot **30** with two opposite cavities **31**.

On the rotating disc **3** is mounted an elevating cylinder **4** which is composed of two halves joined together by a screw **40**. The top of the elevating cylinder **4** has a protuberance **42** with a tooth **43** adapted to engage with the cavity **31** of the slot **30** of the rotating disc **3** so that the elevating cylinder **4** may be rotated in unison with the rotating disc **3**. Further, the elevating cylinder **4** is formed with external threads **44** on its outer surface and has a recess **45** for receiving a spring **46**. Furthermore, the elevating cylinder **4** is provided with a foot member **47**.

A guide ring **50** is fitted in the hole **11** of the body portion **1** and provided with internal threads **50** engaged with the external threads **44** of the elevating cylinder **4**.

A movable press plate **6** is engaged with the lower end of the elevating cylinder **4** and provided on the upper end with a neck **60** having a flange **61** on the top. The neck **60** is engaged with the foot member **47** of the elevating cylinder **4** so that the movable press plate **6** is prevented from detaching from the elevating cylinder **4**.

A brush **7** is connected with the container **2** via the flexible pipe **22**. The brush **7** includes a handle **70** composed of two halves, a connector **71**, and a control member **72**. The handle **70** includes a tubular member **73**, a slot **74**, two engaging members **75**, and two holes **76**. The tubular member **73** of the handle **70** is engaged with a collar **77** of the control member **71** while the slot **74** of the handle **70** receives a press portion **78** of the control member **72**. The engaging member **75** are used to join the two halves of the handle **70** together. The holes **76** of the brush **70** are designed for the passage of the flexible pipe **22**. In addition, the upper half of the brush **70** has a slot **7A** for receiving an adjusting knob **7B** which may be used to control the flow rate of the paint through the flexible pipe **22** in association with a blocking plate **7C**. One end of the connector **71** is provided with a recess **7D** for receiving the upper end of the brush **70**, while the other end of the connector **71** is connected with bristles **7E** by rivets **7F**.

FIGS. **3** through **7** show the working principle of the present invention. As illustrated, when in use, the container **2** is first removed from the body portion **1** and filled with paint. Then, the container **2** is mounted into the opening **10** of the body portion **1** and the body portion **1** may be connected with belt **8** of an user. Thereafter, the user may regulate the position of the adjusting knob **7B** so as to adjust the cross sectional area of the flexible pipe **22** thereby controlling the flow rate of the paint passing through the flexible pipe **22**. Afterwards, the rotating disc **3** is turned to lower the elevating cylinder **4** so that the paint will be forced to flow to the bristles **7E** of the brush **7** through the flexible pipe **2** from the container **2**.

When required to supplement paint, it is only necessary to turn the rotating disc **3** to move down the elevat-

ing cylinder **4** so as to supply paint to the brush **7** through the flexible pipe **22**.

As the adjusting knob **7B** is set to close the flexible pipe **22**, the movable press plate **6** will be kept at a fixed position even when the rotating disc **3** is turned downwards thereby protecting the container **2** from being damaged.

The invention is naturally not limited in any sense to the particular features specified in the forgoing or to the details of the particular embodiment which has been chosen in order to illustrate the invention. Consideration can be given to all kinds of variants of the particular embodiment which has been described by way of example and of its constituent elements without thereby departing from the scope of the invention. This invention accordingly includes all the means constituting technical equivalents of the means described as well as their combinations.

I claim:

1. A paint supplying device comprising:

a body portion;

a compressible container disposed within said body portion and provided at the bottom with an outlet engaged with a cap;

a rotating disc mounted on the top of said container and having a slot;

an elevating cylinder having at the top a protuberance engaged with the slot of said rotating disc and formed with external threads;

a spring arranged within said elevating cylinder;

a guide ring threadedly engaged with said elevating cylinder;

a movable press plate engaged with the lower end of said elevating cylinder and provided on the upper end with a neck having a flange on the top; and

a brush connected with said container via a flexible pipe.

2. The paint supplying device as claimed in claim **1**, wherein said body portion is provided with a hook member.

3. The paint supplying device as claimed in claim **1**, wherein said brush is provided with an adjusting knob adapted to control the cross-sectional area of said flexible pipe.

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